



vodafone

Recording mobile telephone conversations in financial institutions

White Paper

power to you

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Summary

The recording of all telephone and electronic conversations has long been seen as essential for banks and financial institutions. It provides an audit trail where evidence of fraud or insider trading is sought, and it gives the institution itself a record where instructions are subsequently queried.

Until recently an exception has been made for conversations on mobile telephones, largely because the technical challenges were thought to be too great. The increasing use of mobile phones means that this exception can no longer be sustained, and so technology has to be established to make this practical.

In the UK, the Financial Services Authority (FSA) has established that systems must be in place to record all "relevant conversations" by November 2011. The European Union will be issuing an update to its Markets in Financial Instruments Directive (MiFID) in March 2011 which is expected to carry broadly the same message, that the exemption for mobile recording must be lifted. Other markets around the world are likely to follow with similar regulation.

This paper looks at the technical solutions to ensuring that all mobile conversations are securely recorded.

Background

Financial services professionals handling high value transactions on behalf of banks and financial institutions need access to communications at all times. Their high wealth clients may need to ask advice and give instructions at any time. The ability to be able to handle such calls on a mobile device is clearly a fundamental requirement.

Given the value of these transactions, there are two strong drivers for all calls to be recorded and archived in a way in which they can be recalled and researched at a later date.

The first is that, should suspicions be raised of insider trader or other illegal or fraudulent behaviour, the precise wording and timing of telephone calls may be critical to the investigation. Regulatory bodies, such as the UK FSA, therefore require recording of voice conversations and electronic communications (such as text messaging) as part of their initiatives to detect, investigate and deter illegal market manipulations.

The second driver is a protection for the bank or financial institution. If there is a subsequent dispute concerning the nature of advice offered, or instructions given, a recording of the conversation can help in its resolution. Without a recording, banks are unable to defend a challenge from the customer, which can expose them to significant financial losses. The costs of implementing and operating a voice recording system could well be covered by savings achieved through better dispute resolution.

Other, less tangible benefits include increased confidence in the institution because it is demonstrably taking all steps to ensure risk management best practice, and the ability to monitor trader performance and their interactions with clients.

Voice recording of all calls to and from the trading floor is now standard practice. Calls to and from mobile devices now need to be brought into the same system as a matter of urgency. UK institutions will need to implement the system by November 2011 to meet the regulatory requirement. As already noted, other countries are likely to follow suit quickly.

Fundamental requirements

When considering a system to record mobile conversations, there are a number of fundamental requirements which should be considered:

Minimum impact – the users are busy, high value employees, who need immediate and foolproof communication. The solution should not place any additional burden on them, or have any impact on call quality or on the chances of the connection being dropped.

No user dependency – for a solution to be truly compliant, and an effective tool in reducing risk, it is clear that it must have no user dependency, so that all calls and text messages are automatically recorded without any user intervention.

Supported on different devices – Ideally there should be no requirement for the user to change phone. As a minimum, a mobile recording solution should work with a choice of major smartphone platforms.

Work everywhere – mobile telephones are, by their very definition, mobile. The recording system should work wherever the user and the customer are in the world, seamlessly supporting roaming and international calls.

Capture all calls – there should be no way for the user to circumvent the recording process.

Resilience – whatever technologies operate behind the scenes they should ensure the complete recording of every call. In recognition of the fact that all technology can fail at times, the right solution should include full resilience throughout, and use well proven, robust technology.

Secure the recording – there should be no circumstances under which the recording, once made, is not securely archived. Financial institutions already have secure recording and archiving platforms in place for fixed line calls, and ideally the mobile solution should work in conjunction with this proven and readily protected system.

Privacy – there should be consideration that some private calls may be made on the same mobile device which will need protection, but equally there should be no incentive for the user to carry multiple mobile phones which could lead to business transactions being made on an unrecorded mobile.

Global deployment – many financial institutions have operations in multiple countries, and while the regulatory requirement for mobile recording is only in force in a few countries at present, it appears likely that regulation will require the recording of mobile communications in an increasing number of countries, especially in light of the EU's recent consultation paper on this topic. It is therefore highly desirable – commercially and technically – that the chosen mobile recording solution provider can deliver and support the same technology, uniformly in whichever countries it is required. Additionally, there are differences in the fine details of the regulations and privacy laws in each of these countries, which means that it is essential that the chosen solution is easily configurable to support these differing requirements.

Platform agnostic – with a handful of different voice recorder manufacturers in the industry, it is important that a mobile recording solution integrates easily with all of these, particularly as many institutions may use more than one supplier. Additionally, it is desirable for the solution to integrate with these platforms without any requirement to purchase extra modules or interfaces from these manufacturers, and without locking the institution in to a particular voice recorder platform.

Record voice, text messages and other communications – the wording of mobile recording regulations tend to be ambiguous, thereby maximising their potential scope. As a result, ALL mobile communications could be deemed to be covered by the requirement for recording. Therefore, the chosen mobile recording solution should enable the recording of the prevalent forms of mobile communications, which today comprise voice calls (including voicemail) and text messages. This scope could be widened to include instant messaging, video calling and multimedia messaging, if it is deemed that "relevant conversations" are being conducted using these channels.

Outline technical solutions

There are, in terms of technology, four primary methods in which mobile recording can be achieved:

- on the phone itself
- by using a conference call to "conference in" the voice recorder
- using a fixed-mobile convergence (FMC) or unified communications (UC) solution
- on an "inline" system in which the call is routed through the corporate voice recording environment

Each of these will be considered in turn.

Recording on the handset

This is superficially an attractive proposition. Call set-up time and quality is completely unaffected and, once the additional software is loaded onto the phone there is no impact on the user.

All calls to and from the mobile will be recorded on the handset. Immediately after the call is complete, the digital recording is transmitted as a data communication to the recording centre.

This system does fail on at least one of the fundamental requirements, and perhaps the most important of them. The recording cannot be regarded as securely archived until the data transmission to the recording platform is complete. There are a number of circumstances in which this might not happen.

First, the user may take, or make, another call immediately after the first. In the case of receiving instructions from a customer it is quite likely that there will be another call, to a colleague on the trading floor to execute the instructions. So the data will not be immediately transferred, and there is a risk of calls getting backed up and perhaps overflowing the memory on the phone.

The user may move to a position where there is no coverage, preventing the recording being transferred, or the battery may become exhausted.

Finally, in the case of an illegal transaction, the user may choose to destroy the phone or disable it in some way before there is time to transmit the data to the recording centre.

As a conference call

In this proposition, software on the user's phone automatically connects to the recording system as the third party in a conference call, allowing it to record the conversation between the user and the customer. This may fail for a number of reasons.

First, not all mobile networks allow conference calling, meaning that this solution fails the objective of being able to work anywhere. If the user is roaming, even if the overseas network allows conference calling it may take some time to establish the connection to the recording platform, which will delay the conversation and thus disrupt the work of the user. It will also represent a significant additional operating cost.

Second, for a number of reasons, the connection to the recording platform may be dropped while the primary connection between the user and the customer remain. This would allow the conversation to continue without being recorded.

Anybody who has conducted a conference call with parties using mobile phones will know that callers can drop out, then dial back in again. In the case of a mobile recording solution based on conference calling, this could mean important sections of conversations missing from recordings.

Unified communications or fixed-mobile convergence

UC and FMC based solutions route outbound calls through the corporate telecoms infrastructure, and therefore, allow the simple recording of outbound calls on the company's existing in-house voice recording platforms.

However, the recording of inbound calls poses a bigger challenge. Most of these solutions rely on the assumption that the company's employees only ever publicise their "one" number, which routes all inbound calls to the most convenient endpoint, either fixed line phone, mobile, or PC headset.

There is, unfortunately, a serious weakness in this type of solution. Any inbound calls that are dialled using the user's mobile number (rather than the "one" number) will be delivered to the mobile, without being routed via the recording infrastructure, and therefore will not be recorded. In practice this is highly likely: all it takes is for a user to send a text message to an external party for them to have the user's "real" mobile number, which they can call at any time.

In-line recording

This solution automatically routes all calls to and from the user's mobile to a routing gateway which is connected to the recording platform. This initiates a second call to complete the circuit.

When a customer calls a user's mobile number, the call is actually diverted to the routing gateway which plays a brief greeting message (such as "Welcome to ...: we are connecting your call. Your call is being recorded.") while initiating a second call to the user to complete the connection.

Once established, the call takes place transparently with no impact on call quality or delay, but with the complete conversation being securely recorded. Because the call is routed through the recording environment there is no possibility of any part of the conversation being lost.

It therefore meets the fundamental requirements of the system in providing secure recording which cannot be circumvented by the user, and without requiring additional effort or operations. Calls are recorded in their entirety as part of the call flow. For this reason, this is the solution preferred by Vodafone.

Privacy concerns

There is a conflict between the requirement to record all business calls made by a user and that user's right to privacy when making personal calls. This is a difficult conflict to resolve.

To ensure the integrity of the recording of all telephone conversations, the FSA regulations require banks and financial institutions to take all reasonable efforts to ensure that users do not make business calls on personal mobile phones. A strong way of ensuring compliance is to encourage users to carry just one mobile phone.

If that is the case then there has to be a means of ensuring that those private conversations do not become part of any business process or investigation. One way of achieving this is through a "white list" of numbers – the user's home, for example – which do not need to be recorded.

In practice, banks may prefer to use the security systems they have already established for fixed-line telephone recording, including those privacy settings.

Regulatory requirements

The drive to implement recording of mobile telephone conversations is being driven in the UK by the FSA's decision to remove the "mobile exemption" from November 2011.

At the same time regulatory bodies in other financial centres, including the European Union, are drawing up their own requirements, which are likely to be enforced in the near future. While their plans are still at the consultative stage there is a theoretical risk that other regulations may be tighter than those of the FSA.

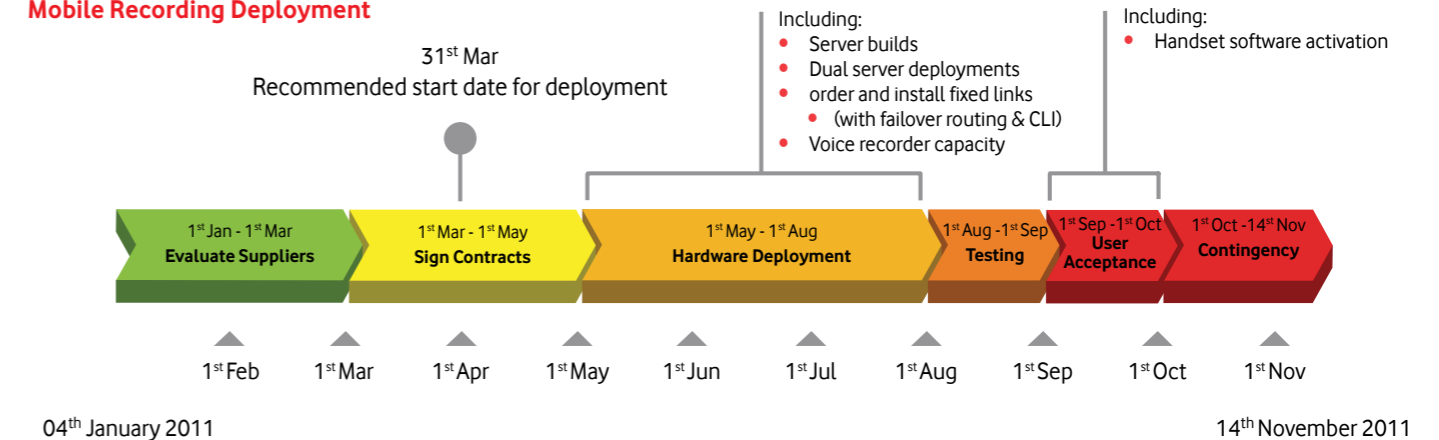
Variations in regulations are certain, with key differences likely to include factors such as the length of time that recordings must be kept – the FSA requirement is for six months, while current EU discussion documents call for three years, for example – or the legality of white lists for calls which need not be recorded.

It is likely that a system for recording mobile conversations which is implemented to meet the FSA regulations in 2011 can be extended to meet the requirements of any regulatory authority or commercial requirement, anywhere in the world. It will be important, however, to consider the ability of the system to be configured to meet specific local regulations such as archive time or white list capabilities.

Implementation and timeline

With a UK deadline of November 2011 looming, by which time the recording of mobile calls and SMS has to be operational, it is clear that banks and financial institutions need to make implementing the technology a high priority. Looking at this high level implementation plan, it is clear that there is little time to spare.

Mobile Recording Deployment



Hardware deployment – most onsite mobile recording solutions will require the deployment of additional dedicated hardware within the institution's environment. This will also require the ordering and installation of extra links to connect the hardware to the external public telephony network, and possibly extra voice recorder capacity. This activity will typically require around three months.

Testing – before moving into the user acceptance phase, the hardware element of the installation will need to undergo thorough testing.

User acceptance – the users of mobile recording solutions include the institution's highest value employees. In many investment banks there could be 1000 or more users. It is therefore imperative that sufficient time is allowed for these users' devices to be configured (including the loading of any software) and tested, and, for user training and acceptance, to prevent any disruption to these users' normal activity.

Contingency – IT projects in large organisations are often prone to delays. It is therefore important to allow a period of contingency, to allow for any project slip, without missing the 14 November deadline.

Therefore, it is clear that, in order to meet the regulatory deadline, any institution should have selected, and signed contracts with, a supplier by the end of April 2011, at the latest. However, with a large proportion of the UK's financial services industry still needing to act to achieve compliance by November, it would be advisable to take steps as quickly as possible.

Selecting a partner

Choosing the right partner, one that fully understands the different components involved and that is financially stable, is critical to successful deployment. Sourcing a mobile recording solution through a single global service provider can dramatically reduce the cost and complexity of multinational deployments.

Whichever partner you choose, as a minimum they must be able to:

- satisfy the enterprise of their financial and corporate stability
- provide complete end-to-end service management
- provide consistent services, support and account management on a local, regional and global scale
- have direct influence and control over the network design and functionality
- be of a stature that enables global influence with other operators if needed.

Vodafone Global Enterprise solution

Vodafone Global Enterprise is a dedicated business unit within Vodafone which provides managed communications and other services to multinational companies. It has launched a global mobile recording solution to ensure that financial institutions meet the new regulatory obligations.

The solution is in two parts. First, there is a software client on the user's phone which routes each call, not direct to the called party, but to the Vodafone Mobile Recording server (VMR), which is the second element of the system. This is a piece of hardware that is installed in the bank's environment, close to the bank's existing voice recording platforms. The VMR enables the recording of the calls on the bank's existing voice recorder, with all of the required call metadata.

It provides the following benefits:

- low user impact
- reliable recording through a resilient "in-line" solution
- records voice calls, voicemails and text messages in client's existing and proven secure environment
- seamless integration into existing in-house voice recorders
- global end-to-end managed solution.

Because of the critical nature of call recording, the financial institution is likely to have a redundant voice recording system, either duplicated locally or in a disaster recovery centre. The architecture of the Vodafone solution supports matching redundancy to ensure comparable levels of security.

Conclusion

In the UK, the regulatory authorities have determined that all relevant communications on mobile phones (which includes text messaging as well as voice) must be recorded, from November 2011. The EU is soon to issue its regulatory requirements, and other major international financial centres are sure to follow suit.

Banks and others carrying out high value business must, therefore, move swiftly to implement the recording of mobile communications. While there are a number of technical solutions available, an “in-line” recording system best meets all of the key requirements of security and consistency, ensuring that there is no possibility of circumventing the system, and that conversations cannot take place without being recorded.

Recording of mobile calls is mission critical in that, without a proven solution in place, regulatory authorities will restrict the bank’s ability to do business. As well as providing inherent security, the solution needs to be technically proven and stable, and provided by a supplier which is a secure, global supplier of communications solutions.

Finally, timescales for the implementation of mobile recording, certainly in the UK, are tight, given a typical six month project and an absolute deadline of 14 November 2011. This is a requirement that needs to be planned for now.

About Vodafone Global Enterprise

Vodafone Global Enterprise provides managed communications services to many of the world’s leading multi-national companies. It supports communications wherever its customers are present: in Europe, the Middle East, Asia-Pacific and the United States.

Vodafone was positioned in the “leaders” quadrant of the Gartner Magic Quadrant for pan-western European mobile service providers and in the Gartner Magic Quadrant for telecom expense management.

www.vodafone.com/globalenterprise

<http://enterprise.vodafone.com>

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